To: "Robert Law" [rlaw@demaximis.com]
Cc: "Jason Magalen" [jmagalen@seaengineering.com]; William.Gerken@aecom.com>[]
Bcc: []
From: CN=Eugenia Naranjo/OU=R2/O=USEPA/C=US
Sent: Fri 1/4/2013 3:02:29 PM
Subject: Re: Use of CARIS software for processing NB bathymetry data
rlaw@demaximis.com
Naranjo.Eugenia@epamail.epa.gov
Naranjo.Eugenia@epamail.epa.gov
www.caris.com
Naranjo.Eugenia@epa.gov

Jason finds it acceptable and superior than HYPACK for processing large datasets.
The QAPP states: "All multi-beam data collection and post processing procedures will meet or exceed standards presented in the USACE Hydrographic Surveying Manual, EM 1110-2-1003 (USACE 2002)."
I just wanted to check that this is acceptable for CPG.

Eugenia Naranjo
United States Environmental Protection Agency
290 Broadway
New York, NY 10007-1866
212-637-3467
Naranjo.Eugenia@epa.gov

-----"Robert Law" <rlaw@demaximis.com> wrote: -----
To: Eugenia Naranjo/R2/USEPA/US@EPA
From: "Robert Law" <rlaw@demaximis.com>
Date: 01/04/2013 08:53AM
Cc: <William.Gerken@aecom.com>, <jmagalen@seaengineering.com>
Subject: Re: Use of CARIS software for processing NB bathymetry data

I defer to Jason and Bill on this. This wasn't identified in the QAPP?

Robert Law, PhD
rlaw@demaximis.com
Sent from my iPhone

On Jan 4, 2013, at 9:46, "<Naranjo.Eugenia@epamail.epa.gov>" <Naranjo.Eugenia@epamail.epa.gov> wrote:
Rob,
Tierra/OSI has requested to be able to use the CARIS processing software (www.caris.com) instead of Hypack to process the Newark Bay bathymetry data. We understand that OSI uses this application for their large bathy efforts for NOAA and finds it much more efficient for processing large datasets (e.g. Newark Bay). Based on the excerpt below from the Corps manual (Chapter 11, Page 14), this is acceptable to EPA. Let me know if you have any questions or want to discuss.

"A number of multibeam data acquisition software packages are used by Corps districts. The more common packages include HYPACK/HYSWEEP MAX (Coastal Oceanographics), Bathy Pro Real Time (Triton Elics), and 6042 Version 7 (Reson, Inc.). Data acquisition packages must support all navigation peripheral devices, such as those shown in Figure 11-9. They must also provide the QC and QA calibration and testing requirements indicated in Table 11-2 at the end of this chapter. Other software packages (e.g., Caris) are tailored to post-processing of multibeam data. Both data acquisition

and processing packages must be capable of editing and processing data to meet engineering and construction purposes, as opposed to nautical charting functions. If the software packages do not meet these criteria, then multibeam data may have to be processed using standard engineering CARD packages such as AutoCAD or MicroStation."

Eugenia Naranjo
United States Environmental Protection Agency
290 Broadway
New York, NY 10007-1866
212-637-3467
Naranjo.Eugenia@epa.gov